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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/604,465	07/23/2003	Mats SABELSTROM	00173.0033.PCUS00	1464

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EXAMINER	
NGUYEN, TU MINH	

ART UNIT	PAPER NUMBER
3748	

DATE MAILED: 05/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/604,465	SABELSTROM ET AL.	
	Examiner	Art Unit	
	Tu M. Nguyen	3748	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-14 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-14 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on 23 July 2003 is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 092403.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 7 is rejected under 35 U.S.C. 112, second paragraph, because the claim recites the limitation "the engine". There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office Action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-4 and 6-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Emerson et al. (U.S. Patent 5,151,022) in view of Leins (U.S. Patent 4,122,673).

Re claims 1, 8, and 10, as shown in Figure 1, Emerson et al. disclose an arrangement for establishing a vehicular transported compressor that incorporates a catalyst near the compressor and a method for providing a compressed air system in said vehicle, the arrangement comprising:

- a compressor (22) for generating compressed air and a connection for conveying compressed air generated by the compressor to a remaining portion of a compressed air system of a vehicle; and

- an oxidation catalyst (12) adapted for purifying generated compressed air.

Emerson et al., however, fail to disclose that the oxidation catalyst is integrally arranged within the compressor thereby establishing a combined compressor and catalytic device.

As shown in Figure 2, Leins teaches an engine with catalytic reaction in a supercharger turbine case, comprising catalyst blocks (12) located at the turbine inlet (2a) and the turbine outlet (2b) to eliminate harmful emissions in the exhaust gas. By locating the oxidation catalyst (12) at the compressor inlet and outlet as suggested by Leins, Emerson et al. are able to maintain the catalyst at a desired operating temperature range by making use of the hot temperature air within the compressor. It would have been obvious to one having ordinary skill in the art at the time of the invention was made, to have placed the oxidation catalyst of Emerson et al. within the compressor as suggested by Leins, since the application thereof would have further purified the compressed air.

Re claim 2, in the modified arrangement of Emerson et al., the oxidation catalyst is fit into a space defined in a cylinder head at an outlet of the compressor (as suggested by Leins).

Re claim 3, in the modified arrangement of Emerson et al., the oxidation catalyst further comprises a plurality of separate catalyst units (at compressor inlet and compressor outlet), each with catalytically active material.

Re claims 4 and 6, the modified arrangement of Emerson et al. further comprises a temperature control means for controlling the temperature of compressed air generated by the compressor, wherein the temperature control means comprises a cooling device (44).

Re claim 7, in the modified arrangement of Emerson et al., the arrangement is obviously installed in a diesel engine.

Re claim 9, the modified method of Emerson et al. further comprises providing a device for generating and purifying the compressed air, the device comprising a compressor (22) and an oxidation catalyst (12), the oxidation catalyst being adapted for purifying the generated compressed air in direct connection with an outlet of the compressor, the oxidation catalyst being integrally arranged within the compressor and together with the compressor constitutes a combined compressor and catalyst device.

Re claims 11-13, the modified arrangement of Emerson et al. further comprises an oxidation catalyst (12) being located in an oxidation catalytic treatment stage compartment, and the oxidation catalytic treatment stage compartment being fit into a space defined in a cylinder head of the cylinder-defining body at a compressed air outlet from a defined cylinder of the catalyzing air compressor, wherein the oxidation catalyst (12) is located downstream from a lamella-based exhaust valve associated with a compression cylinder of the catalyzing air compressor.

Re claim 14, the modified arrangement of Emerson et al. further comprises a receiving space having an interior sufficiently large to accommodate an integrally constructed catalyzing air compressor with an oxidation catalytic treatment stage compartment, the interior of the

receiving space further being sufficiently small to preclude installation of a non-integrally constructed air compressor and oxidation catalytic treatment stage compartment therein.

5. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Emerson et al. in view of Leins as applied to claim 4 above, and further in view of Fielding (U.S. Patent 5,927,084).

The modified arrangement of Emerson et al. discloses the invention as cited above, however, fails to disclose that the temperature control means comprises an electric heating device.

As illustrated in Figures 1-2, Fielding teaches an air conditioning system comprising a compressor (2) providing a compressed air to a catalytic filter (5) having heating device (30) to maintain the filter at an operating temperature range. It would have been obvious to one having ordinary skill in the art at the time of the invention was made, to have utilized the catalytic filter taught by Fielding in the modified arrangement of Emerson et al., since the use thereof would have further purified the compressed air.

Prior Art

6. The IDS (PTO-1449) filed on September 24, 2003 has been considered. An initialized copy is attached hereto.

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure and consists of six patents: Bauman (U.S. Patent 3,908,367), Veltman et al. (U.S. Patent 4,732,579), El-Nashar (U.S. Patent 4,744,213), Taslim et al. (U.S. Patent 5,013,340),

Bannai et al. (U.S. Patent 5,855,112), and Fujii et al. (Japan Publication 06-185856) further disclose a state of the art.

Communication

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Tu Nguyen whose telephone number is (703) 308-2833.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Thomas E. Denion, can be reached on (703) 308-2623. The fax phone number for this group is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-1148.

Tu M. Nguyen

TMN

May 16, 2004

Tu M. Nguyen

Patent Examiner

Art Unit 3748